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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,996	07/26/2000	R. Dean Adams	FIS9-2000-0138US1	8495

30743 7590 04/14/2004

WHITHAM, CURTIS & CHRISTOFFERSON, P.C.
11491 SUNSET HILLS ROAD
SUITE 340
RESTON, VA 20190

EXAMINER

CHAUDRY, MUJTABA M

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 04/14/2004

24

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/625,996

Applicant(s)

ADAMS ET AL.

Examiner

Mujtaba K Chaudry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8 and 10-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The corrected or substitute drawings were received on February 20, 2004. These drawings are accepted.

Response to Amendment

Applicant's arguments/amendments with respect to amended claims 1, 6, 8 and 12 and previously present claims 3-5, 7, 10, 11 and 13-17 filed February 20, 2004 have been fully considered but are not persuasive. As a note of reference, claims 2 and 9 have been cancelled, see paper No. 23.

The following is a quote from the MPEP 2111.

CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

*During patent examination, the pending claims must be "given *>their< broadest reasonable interpretation consistent with the specification." > In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). < Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969) (Claim 9 was directed to a process of analyzing data generated by mass spectrographic analysis of a gas. The process comprised selecting the data to be analyzed by subjecting the data to a mathematical manipulation. The examiner made rejections under 35 U.S.C. 101 and 102. In the 35 U.S.C. 102 rejection, the examiner explained that the claim was anticipated by a mental process augmented by pencil and paper markings. The court agreed that the claim was not limited to using a machine to carry out the process since the claim did not explicitly set forth the machine. The court explained that "reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from reading limitations of the specification into a claim, to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim." The court found that applicant was advocating the latter, i.e., the impermissible importation of subject matter from the specification into the claim.). See also In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO*

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is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO

applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant's specification.").

*The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999) (The Board's construction of the claim limitation "restore hair growth" as requiring the hair to be returned to its original state was held to be an ** >incorrect< interpretation of the limitation. The court held that, consistent with applicant's disclosure and the disclosure of three patents from analogous arts using the same phrase to require only some increase in hair growth, one of ordinary skill would construe "restore hair growth" to mean that the claimed method increases the amount of hair grown on the scalp, but does not necessarily produce a full head of hair.).*

Response to Arguments

Applicant contends, "...no initialization function is described or suggested in Schwarz (prior art of record) but, rather, a substantial difficulty of synchronization is admitted to supply address signals during debugging..." The Examiner disagrees and provides the following explanation for maintaining the rejection of pending claims. According to MPEP 2111, claims must be give the broadest reasonable interpretation. The limitation which the Applicant sees as conflicting between the prior art and the present application seems to be "an initialization function" or means of initialization. Pertinent section of claim 1 of the present application recites, "...wherein said means for generating default test instructions includes an initialization storage means for providing signal for initializing said means for storing test instructions in the absence of said test instructions provided from an external tester." The Examiner would like to point out that Schwarz teaches (Figure 2 and abstract) s reconfigurable built-in self test circuit for enabling the debugging of an embedded device. In one embodiment, the write data path

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from the built-in self-test module to the embedded device includes a multiplexer which is controlled by a debug signal. **When the debug signal is de-asserted, the multiplexer forwards the write data from the built-in self-test module to the embedded device, thereby allowing the self-test to proceed in the hard wired manner. When the debug signal is asserted, the multiplexer forwards external data from the user to the embedded device, thereby allowing the user to execute customized tests on the embedded device.** Emphasis added. In other words, when the debug signal is de-asserted, a system level test is performed from the BIST engine which has the test instructions for performing this test when the external test instructions are not used for testing. A second multiplexer is similarly placed in the expected data path from the built-in self-test module to the comparator to allow the user to provide external data for comparison with output data from the embedded device when the debug signal is asserted. **For all tests, the address and control data is provided by the built-in self-test module to avoid the need to implement an external access to these data paths.** Furthermore, Schwarz points out (col. 1, lines 12-61) ASIC chips have been tested using external Automatic Test Equipment (ATE) at the manufacturing site. Since speed is an issue, and since it is often difficult to provide external access to certain chip functionality, an increasingly standard technique is the use of built-in self-test (BIST) circuitry. In this technique, additional hardware is added to a design so that testing is accomplished with a reduced need for external special purpose testing hardware. One popular example of **BIST circuitry is the use of a pseudorandom vector generator and a data compactor. The generator produces the test vectors to be applied to a circuit under test and the compactor reduces the response to these vectors to a single value (e.g., 16 or 32 bits) known as the**

signature. It is then possible for the ATE to initialize or provide parameters to the generator and examine signatures from the compactor to verify the functionality of the chip. Therefore the BIST structure must have an initialization means to apply the store/default test instructions in the absence of external test instructions.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-17 are rejected under 35 U.S.C. 102(e) as being unpatentable over Schwartz (USPN 5982681). See Paper No. 7, 10, 15 and 20.

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The Examiner disagrees with the Applicant and maintains rejections with respect to amended claims 1, 6, 8 and 12 and previously present claims 3-5, 7, 10, 11 and 13-17. All arguments have been considered. It is the Examiner's conclusion that amended claims 1, 6, 8 and 12 and previously present claims 3-5, 7, 10, 11 and 13-17 are not patentably distinct or non-obvious over the prior art of record. See Paper No. 7, 10, 15 and 20.


Conclusion

Any inquiries concerning this communication should be directed to the examiner, Mujtaba Chaudry who may be reached at 703-305-7755. The examiner may normally be reached Mon – Thur 7:30 am to 4:30 pm and every other Fri 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, please contact the examiner's supervisor, Albert DeCady at 703-305-9595. The fax phone number for the organization where this application is assigned is 703-746-7239.

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the receptionist at 703-305-3900.


Mujtaba Chaudry
Art Unit 2133
April 8, 2004


ALBERT DECADY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100